

CLAIMS:

Sub 82/ 1. A method of examining a recording track (2) of a record carrier (1) for the presence of a defect, wherein the track to be examined is followed and the resulting tracking signal is monitored, and wherein the examined recording track is rated on the basis of characteristics of the resulting tracking signal.

5 2. A method as claimed in Claim 1, wherein the examined recording track is rated as being defective if the absolute value of the tracking signal has a value which exceeds a predetermined signal threshold for a predetermined period of time or longer.

10 3. A method as claimed in Claim 2, wherein the tracking signal has a nominal signal value of zero which corresponds to the center of a track, and has a maximum value which corresponds to a maximum lateral deviation with respect to the center of a track, and wherein a level of a preselected fraction of said maximum value is chosen as signal threshold, which preselected fraction is preferably equal to approximately 0.5.

15 Sub A 4. A method as claimed in Claim 2 or 3, wherein said predetermined period of time lies in a range from approximately 50 μ s to approximately 75 μ s, and is preferably approximately 60 μ s.

20 Sub A 5. A method of examining a record carrier (1) for the presence of spot defects (12; 13), the method comprising the following steps:

a) examining the integrity of predetermined test tracks (2T) of the record carrier (1), preferably by means of a method as claimed in any one of the preceding Claims;

b) examining the integrity of tracks (2) adjacent the relevant test track (2T2; 2T3) each time

25 that upon the examination a test track (2T2; 2T3) appears to be defective, in order to determine in this way the number (X) of tracks (2) affected by the same spot defect (12; 13);

c) entering the relevant tracks (2) in a defect list each time that the number (X) thus determined in the step (b) is greater than a predetermined threshold value (M);

d) storing the defect list in a memory (25).

Sub B2 6. A method as claimed in Claim 5, wherein each time a predetermined number (N) of tracks (2) between successive test tracks (2T) is skipped, said number (N) being preferably equal to approximately 50.

Sub A3 7. A method as claimed in Claim 5 or 6, wherein the defect list is recorded on the examined record carrier (1).

Sub A4 8. A method of recording information, particularly real time video, on a record carrier (1) of the type having a multitude of concentric substantially circular recording tracks (2), particularly a DVR disc, the method comprising the steps of:
10 (2), particularly a DVR disc, the method comprising the steps of:
- first providing, in an examination phase, a defect list of tracks affected by a comparatively large spot defect (13) by means of a method as claimed in any one of the Claims 5-7;
- subsequently recording information on the disc in a recording phase while reference is made to said defect list, the recording tracks included in said defect list being skipped in the
15 recording process.

Sub A5 9. A method of examining a record carrier (1) for the presence of spot defects (12; 13), comprising the following steps:

a) examining the integrity of predetermined test tracks (2T) of the record carrier (1), preferably
20 by means of a method as claimed in any one of the Claims 1-4;

b) entering the relevant tracks (2T2; 2T3) in a primary defect list each time that upon the examination of a test track (2T2; 2T3) it appears to be defective, and, optionally, entering tracks (2) situated in a suspect area (3T2; 3T3) at opposite sides of the relevant test track (2T2; 2T3) in an alarm list;

25 c) storing the primary defect list and, if applicable, the alarm list in a memory (25).

Sub B2
Car 11 10. A method as claimed in Claim 9, wherein each time a predetermined number (N) of tracks (2) between successive test tracks (2T) is skipped, and wherein each suspect area always extends from the relevant test track (2T2; 2T3) to the directly preceding and the
30 directly following test track, respectively, said number (N) being preferably approximately 50.

Sub A6 11. A method of recording information, particularly real time video, on a record carrier (1) of the type having a multitude of concentric substantially circular recording tracks (2), particularly a DVR disc, the method comprising the steps of:

- first providing, in a primary examination phase, a primary defect list of test tracks (2T2; 2T3) having a defect and, optionally, an alarm list of tracks (2) situated in a suspect area (3T2; 3T3) at opposite sides of the relevant test tracks (2T2; 2T3), by means of a method as claimed in any one of the Claims 9-10;
- 5 - subsequently recording information on the disc in a recording phase while reference is made to said primary defect list and said optional alarm list, the recording tracks included in said primary defect list as well as the tracks (2) situated in a suspect area (3T2; 3T3) at opposite sides of the relevant test tracks (2T2; 2T3) being skipped in the recording process;
- subsequently examining the integrity of the tracks (2) in said suspect areas (3T2; 3T3) in a
- 10 secondary examination phase, in order to determine in this way the number (X) of tracks (2) affected by the same spot defect (12; 13);
- entering the relevant tracks (2) in a secondary defect list each time that the number (X) thus determined is greater than a predetermined threshold value (M).

12. A method as claimed in Claim 11, wherein the secondary defect list is recorded on the examined record carrier (1).

13. A method of recording information in a recording track (2) of a record carrier (1), wherein the resulting tracking signal is monitored, and wherein on the basis of

20 characteristics of the resulting tracking signal it is decided whether the recording process is to be continued or discontinued.

14. A method as claimed in Claim 13, wherein the recording process is discontinued if the absolute value of the tracking signal appears to have a value which exceeds

25 a predetermined signal threshold for a predetermined period of time or longer.

15. A method as claimed in Claim 14, wherein the tracking signal has a nominal signal value of zero which corresponds to the center of a track, and has a maximum value which corresponds to a maximum lateral deviation with respect to the center of a track, and

30 wherein a level of a preselected fraction of said maximum value is adopted as signal threshold, which preselected fraction is preferably equal to approximately $2/3$.

Sub 13
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16. A method as claimed in Claim 14 or 15, wherein said predetermined period of time lies in a range from approximately 50 μ s to approximately 75 μ s, and is preferably approximately 60 μ s.

17. A recording device (20) suitable for the recording of information, particularly real time video or audio, on a record carrier (1) of the type comprising a multitude of concentric substantially circular recording tracks (2), particularly an optical disc, which recording device comprises:

- a control unit (22);

10 - a write/read unit (21) adapted to aim a laser beam at a track (2) of a record carrier (1) under control of the control unit (22) and to receive laser light reflected from the disc (1), and further adapted to supply a tracking signal to the control unit (22), which tracking signal has been determined on the basis of the reflected laser light;

wherein the control unit (22) is adapted to carry out the method as claimed in any one of the

15 ~~Claims 1-16.~~

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